NEUROSURGERY

University of Miami
Jackson Health System

TRAINING PROGRAMS
“I believe this is one of the best training programs. The journey from student to neurosurgeon, although at times seemingly eternal, was quite swift and steep. During training, a resident’s task is to absorb multiple small pieces of information from more experienced senior residents and attending mentors: their knowledge, techniques, management, and demeanor. In turn, this year’s graduates are equipped to burn light hot as we have been taught by the country’s premiere collection of mentors and colleagues. I want to thank everyone who has taught, corrected, or shown me the way by your example. These influences and teachings will always be a part of my fiber.”

-Jeremiah N. Johnson, M.D., Chief Resident Class of 2014

“I am grateful to the faculty, residents and staff for tolerating me and teaching me. You have become an extension of my family. I am lucky to have met so many people who are hard to say good bye to. I will always fondly remember my years in Miami.”

-Faiz Ahmad, M.D., Chief Resident Class of 2014

“I would like to thank my wife and family for their love and support, the faculty for their patience and teaching, the residents/fellows for their friendship and teamwork, and the administrative/clinical/hospital staff for their diligence and dedication to our training.

-Ramsey R. Ashour, M.D., Chief Resident Class of 2014

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Overview
The neurosurgical training program at the University of Miami /Jackson Memorial Hospital provides an encompassing clinical experience, rich research opportunities, and the dedication of its faculty to the education of its residents and fellows.

As the only university medical center in South Florida, we directly serve a three county referral area of 5.5 million people. We also receive complex neurosurgical referrals from Latin America, the Caribbean, and Europe. Our greatest source of pride is the quality and contributions of our residents and fellows to our neurosurgical team.

Residency Program
Our program is designed to provide preparation for a career in academic neurosurgery. Our residency training emphasizes clinical and operative skills under the direction of experienced attending neurosurgeons. Frequent surgical training is essential to create skillful and knowledgeable neurosurgeons.

It is important that trainees are exposed in-depth to various subspecialties during their time at the University of Miami Medical Campus /Jackson Memorial Hospital. Residency rotations offer the opportunity to become fully competent in a wide range of subspecialties including neurotrauma, neuroendovascular, neuro-oncology, functional, pediatric, skullbase, and spine.

The program is structured into 3-month and 4-month blocks. The residency rotations are strategically organized to build crucial skills in preparation for the next stage of the program. The structured sequence allows residents to plan their time, studies, and research efforts in advance.
Rotations

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Residents learn how to function as part of a trauma team.

PGY-1

The goal of year one as a neurosurgery resident at Jackson Memorial Hospital (JMH) and the University of Miami Hospital (UMH) is to gain an in-depth foundation in the principles and practices of general surgery and the clinical neurosciences of fundamental importance to neurosurgery.

The PGY-1 year is comprised of three major blocks: 4 months in general neurosurgery, 4 months neurology/ICU, and 4 months of cranial service at JMH.

PGY-2

The PGY-2 year consists of three 4-month blocks at JMH/UMH in the following subspecialties: cranial, spine, and neurotrauma.

Junior cranial residents will learn to deliver neurosurgical care in a tertiary care/university hospital setting. They will have daily exposure to the operating room and a variety of neurosurgical specialties; including neurovascular neurosurgery, tumor surgery (acoustic neuroma, glioma, meningioma, and transsphenoidal), and functional surgery including deep brain stimulation, stereotactic radiosurgery, stereotactic biopsy, and adult epilepsy.

Junior spine residents will receive daily exposure to the operating room and to the surgical management of degenerative spine disease including minimally invasive techniques and spinal reconstruction. Residents will also be taught stabilization and management of trauma to the spine and spinal cord injury.

Junior trauma residents will learn to function as part of the neurosurgical residency team with emphasis on patient assessment in the ER, post-operative care in the ICU, inpatient services, consultation services, outpatient clinics, and trauma craniotomies. While on-call, residents will be exposed to ICU related procedures, including ventriculostomies.
PGY-3
The PGY-3 year consists of a 4-month rotation at JMH in cranial, a 4-month pediatric rotation at Nicklaus Children's Hospital (formally known as Miami Children's Hospital) located a short drive south of the Medical Campus, and a 4-month rotation at the Veterans Administration hospital (VAMC).

The VAMC rotation emphasizes compassionate and empathetic care of the veteran patient. Residents are responsible for histories, physicals, admission and progress notes, operative notes, and management plans for diagnostic workup and treatment while exhibiting thoroughness, accuracy, and timeliness throughout the veteran’s hospitalization.

Patient care at all the hospitals, whether on the wards and in the clinics, will be supervised by faculty and staff. The rapid feedback experience will result in a culture benefiting not just inpatient care, but ongoing learning and self-assessment.

PGY-4
The PGY-4 year consists of one 4-month block in a Neuroradiology/Neurointerventional rotation at JMH, and one 8 month research block or elective.

The eight months of dedicated, protected research time will be used for either a clinical or laboratory-based project. This endeavor will allow the resident to develop the study design, analytical, and manuscript preparation skills, create a poster presentation of the research project to present at an appropriate national forum, and submit one or more manuscripts from the laboratory-based research and/or clinical series for publication by a peer-reviewed journal.

The cranial mid-level resident makes rounds on the entire inpatient service and is expected to see consults on inpatients as requested by other departments. The resident will see the patient, obtain the appropriate clinical information, review the available data and then present a case summary to the faculty. The resident is expected to initiate a plan of care based on review of the literature and interaction with the faculty and see it through to completion. This involves communication with the other medical teams caring for the patient.

The mid-level spine resident develops mature clinical judgment related to the spectrum of problems encountered in spine pathology and injuries. Residents will also demonstrate a mature understanding of surgical strategies and approaches to common and unusual spinal pathology and injuries.

Residents are responsible to delegate appropriate responsibilities to medical students and interns and to ensure their implementation, and supervise junior and medical students in daily patient assessment and care. Spine residents must demonstrate the ability to function independently in all phases of management of patients with spinal disorders.

Residents will acquire a fundamental understanding of a wide range of neurosurgical disorders in children during their pediatric rotation.

Residents learn general principles of neurosurgical management of pediatric patients and become adept in interacting with pediatricians, pediatric specialists, and families; and become familiar and comfortable with pediatric neuroradiology. Residents serve as the primary surgeon under appropriate supervision for basic pediatric neurosurgery procedures.
PGY - 5
In the fifth year, the resident has the option of continuing in an approved research project or achieving special clinical competence through a one-year in-residency “enfolded fellowship” in an area of the resident’s choosing such as spine, neuroendovascular, neurotrauma, or functional.

Twelve months of research includes continuation of their PGY-4 clinical or laboratory-based research project. Residents will continue to develop their study design, analytical, and manuscript preparation skills and will participate in Foundations of Translational Research – “Bootcamp”. This is a course given by the University of Miami for training in the areas of clinical study design, critical literature review, statistics, ethics in research, introduction to translational research, and IRB preparation.

Residents also have the option to participate in a structured year of enfolded fellowship such as spine, led by Dr. Michael Wang, neuroendovascular led by Dr. Eric Peterson, neurotrauma led by Dr. M. Ross Bullock, functional neurosurgery led by Dr. Jonathan Jagid, and surgical neuro-oncology led by Drs. Ronald Benveniste and Ricardo Komotar.

PGY - 6
The PGY-6 year is spent completing 4-month blocks each of senior level cranial and spine at JMH and UMH.

The cranial senior resident develops skills to independently perform fundamental procedures in general neurosurgery. Significant portions of surgeries in subspecialty areas are performed, including vascular, epilepsy, functional, and tumor neurosurgery.

The spine senior resident develops the knowledge to independently assess fundamental spine and peripheral nerve pathology and injury. The resident learns to independently perform the following fundamental procedures in general neurosurgery: laminectomy (both cervical and lumbar) and peripheral nerve release procedures. It is also required to understand and be able to perform anterior and posterior approaches for cervical, thoracic, and lumbar spine. The resident should be able to perform, with assistance, procedures such as cervical and lumbar laminectomy, anterior and posterior fusion procedures for thoracic and lumbar spine, and spinal reconstruction with full range of instrumentation.

PGY-7
PGY-7 is the chief residency year. The chief residents organize the operating schedule and spend 4 months as Chief of the Cranial Surgery Service at JMH, 4 months as Chief of the Spinal Surgery Service at JMH, and 4 months as Chief Resident of Neurosurgery at UMH.

Chief cranial residents are responsible for all aspects of service. This includes the teaching of junior residents and medical students at the appropriate level, gathering essential and accurate information about all neurological patients, and understanding indications for and interpreting the meaning of all laboratory studies and imaging. A chief resident must also be able to devise patient care plans at the level of an independent neurosurgeon for medical and surgical management of traumatic brain injury, simple and complex brain tumors, aneurysms, AVMs, DAVFs, and medical and operative complications.

Chief spine residents direct the operations of a university hospital neurosurgical service. This includes interfacing directly with faculty to formulate treatment plans, performing all major spine neurosurgical procedures at an independent level, yet under the supervision of an attending surgeon, and working with other services to provide the optimal care of the patient, including various operative approaches.

Residents will also gain advanced experience working with the department chairmen on administrative and clinical duties of the entire department and the implementation of advanced neurosurgical problem management techniques.

Dr. Heros was awarded the Accreditation Council for Graduate Medical Education’s (ACGME’s), Parker J. Palmer Courage to Teach Award in 2006.
**Neurosurgical Specialties**

**Spine**

*Dr. Allan D. Levi*, Professor and Chairman of Neurosurgery and Chief of Neurosurgery at Jackson Memorial Hospital, is an extraordinarily skilled surgeon with a special interest in peripheral nerve disorders and treats patients with nerve entrapments, tumors, and trauma. He also maintains a very active clinical research program in neuroprotection and neurotransplantation. Several of our residents have obtained their research training in the lab or as part of the clinical research program. In addition to his spine practice, Dr. Levi has special interest in complex peripheral nerve surgery, providing excellent resident experience in this area of neurosurgery which is also a requirement for board certification. He also is the course director for the Goodman Oral Board Review.

*Dr. Barth A. Green* is one of the most admired and respected leaders at the University of Miami. In addition to the acclaim he has gained as an extraordinarily busy clinical spine surgeon, Dr. Green has had a great impact in Miami as a humanitarian and visionary.

He co-founded and is Chairman of The Miami Project to Cure Paralysis. Dr. Green directs the organization’s applied research programs which include clinical neurophysiology, bioengineering, and reproductive physiology. In addition, he brought to Miami the Shake-A-Leg program for paraplegic patients and co-founded the very active Project Medishare for Haiti. Dr. Green was in Haiti the morning after the January 2010 earthquake. He organized and continues to direct the extraordinary medical relief efforts of the University of Miami in Port au Prince, Haiti. He is also the Director of the University of Miami Global Outreach Initiative. All of these humanitarian activities have gained Dr. Green innumerable local and national acclaim, including the AANS’s Humanitarian Award in 2011.

*Dr. Michael Wang*, Director of our Spine Service and the Spine Fellowship Program, is a nationally and internationally recognized leader and innovator in spine surgery and minimally invasive techniques. Dr. Wang specializes in the treatment of complex spinal disorders and his research areas include the use of robotics in spinal surgery, resorbable spinal implants, the treatment of cervical myelopathy, and the development of new osteobiologic agents to promote spinal fusion. He plays a major role in organized neurosurgery teaching and has mentored many of the trainees in recent publications.

*Dr. Steven Vanni* is a great teacher in the operating room and has developed instrumentation and tested novel techniques in deformity and revision surgery. With training in Osteopathy and as a Chiropractor, Dr. Vanni brings a unique and holistic perspective, offering both surgical and non-surgical treatment options.

*Drs. Glen R. Manzano and Howard Levene* are highly skilled spine surgeons with a great commitment to resident education. Dr. Manzano has a particular interest in tumors of the spine and spinal cord and has created a program focused on research and new treatment options. Dr. Levene also co-directs our Veterans Administration program. He is currently an Investigator on an experimental model of spinal cord injury and its treatments at The Miami Project to Cure Paralysis.

*Drs. Ian Côté and Luis Romero* both joined the neurosurgery faculty in July 2015 after completing their spine fellowship programs with the department. Dr. Côté was awarded a dual fellowship in complex spine and peripheral nerve surgery and now serves as co-director of Neurosurgery at Jackson South Community Hospital (JSCH). Dr. Romero’s fellowship was in complex neurological spine surgery.

The scope of practice ranges from minimally invasive spine surgery and spinal cord tumors to complex spinal instrumentation. This dedicated group of neurospine surgeons collectively have one of the busiest spinal surgery practices in the United States.
Cranial
The cranial program is led by Dr. Jacques J. Morcos, Department Co-Chairman and internationally recognized as a world-class expert in both complex cerebrovascular surgery and the management of skullbase tumors, who directs the microsurgical and skullbase laboratory. Dr. Morcos has developed one of the country’s busiest skullbase surgical programs in collaboration with our nationally recognized ENT neurologists and head and neck surgeons. He treats all aspects of cerebrovascular disease, brain tumor, and skullbase surgery including aneurysms, arteriovenous malformations, carotid stenosis, and pituitary and skullbase tumors.

Dr. Roberto C. Heros is the Director of the Residency Training Program. His major clinical, academic, and research interest has been in cerebrovascular surgery. Dr. Heros has been very active in national leadership positions as past president of the American Association of Neurological Surgery (AANS), the Academy of Neurological Surgeons, and the World Congress of Neurological Surgery.

In 2006, he was the Congress of Neurological Surgeons’ Honored Guest. In 2007, he won the ACGME’s Parker J. Palmer “Courage to Teach” award. In 2010, he was the Harvey Cushing Medalist, the highest award given to a neurosurgeon by the AANS.

Endovascular Neurosurgery
Dr. Eric C. Peterson, Director of Endovascular Neurosurgery, specializes in the treatment of brain aneurysms and arteriovenous malformations (AVMs). He is one of a few dual-trained neurosurgeons in the country able to offer both surgical and minimally invasive endovascular solutions to complex cerebrovascular disease allowing him to perform all interventional and diagnostic neuroangiography, as well as open microvascular surgery. Dr. Peterson co-founded the UM Cerebrovascular Initiative, a research effort focused on preventing the formation and rupture of brain aneurysms and AVMs.

Neurooncology
Dr. Ronald J. Benveniste joined our team in 2008 after a fellowship in surgical neuro- oncology at MD Anderson Center in Houston. He is Chief of Neurosurgery at the VA Medical Center and leads the neuro-oncology program at UMHC/Sylvester Comprehensive Cancer Center and Jackson Memorial Hospital. His laboratory studies the molecular mechanisms of brain cancer metastasis.

Dr. Ricardo J. Komotar leads our surgical neuro-oncology program at University of Miami Hospital and is the Associate Residency Program Director. He trained at Columbia then did a surgical neuro-oncology fellowship at Memorial Sloan-Kettering Cancer Center in New York. His focus is on surgical and radiosurgical treatment of primary and metastatic brain tumors, as well as meningiomas and pituitary lesions. He is the Director of the UM Brain Tumor Initiative with research interests in clinical trial development and translational neuro-oncologic investigations designed to pioneer new therapies for brain tumors.

Dr. Michael E. Ivan joined the neurosurgery faculty in July 2015 after completing a neuro-oncology fellowship program with the department. His focus is on the treatment and management of brain tumors, vascular malformations, and skullbase lesions. Dr. Ivan now serves as co-director of Neurosurgery at Jackson South Community Hospital (JSCH) and Director of Research for the UM Brain Tumor Initiative.

Radiosurgery
Drs. Howard J. Landy and Jonathan R. Jagid direct the stereotactic radiosurgery program, which includes both Gamma Knife Perfexion and Cyberknife systems. Training in radiosurgery emphasizes understanding of clinical radiobiology. The radiosurgery program is closely associated with the department efforts in treatment of selected tumors, vascular disorders, and functional disorders. Spinal radiosurgery is performed with the Cyberknife system.

Head Trauma
Drs. M. Ross Bullock and Jonathan R. Jagid are Co-Directors of Neurotrauma Service at the Ryder Trauma Center at Jackson Memorial Hospital in collaboration with Drs. Howard B. Levene and Ronald Benveniste. Dr. Bullock specializes in vascular and general neurosurgery as well as traumatic brain injury. Dr. Jagid specializes in the areas of functional neurosurgery, epilepsy, traumatic brain injury, and radiosurgery. Residents learn through active involvement in our 24-bed neurosurgical intensive care unit and have the opportunity to perform both basic science and clinical research.

Functional and Epilepsy Neurosurgery
Dr. Jonathan R. Jagid directs the functional and adult epilepsy programs, including deep brain stimulation stereotactic surgery, and open as well as laser surgery for epilepsy. Residents gain exposure to an active clinical and research program in Parkinson’s disease, epilepsy and other movement disorders.
Pediatric Neurosurgery

Our pediatric neurosurgical group is led by Dr. John J. Ragheb, a nationally recognized expert in his field, with a particular interest in the surgical treatment of epilepsy. He and Dr. Sanjiv Bhatia, another highly skilled pediatric neurosurgeon, have one of the busiest pediatric epilepsy programs in the country. Their team is complimented by Dr. Toba Niazi, who completed her residency training at the University of Utah then did a pediatric fellowship at the University of Washington in Seattle, and Dr. Sarah Jernigan, who completed her neurosurgical residency at the Brigham and Women’s Hospital and her fellowship at Boston Children’s Hospital which are both associated with Harvard Medical School. All are very committed to residency education.

UMH Service

The University of Miami Hospital is a 530 bed with 20 operating rooms and full-service state-of-the-art 8 bed Neurosurgery ICU and lies across the street from the Medical Campus. It is the second busiest arm of the neurosurgical program with a 1,000 cases performed each year. Dr. Wang is the Chief of Service and the majority of the adult neurosurgeons have a portion of their practice within the hospital. Areas of strength include neuro-oncology led by Dr. Komotar, minimally invasive spine surgery led by Drs. Wang, Vanni, and Levi, a collaborative practice with ENT focusing on skullbase pathology and hydrocephalus and general spine. Dr. Manzano specializes in spine neuro-oncology and Dr. Jagid focuses on neurostimulation and epilepsy surgery. All are extremely busy and skilled neurosurgeons with expertise in both spinal and cranial surgery and a major commitment to resident education.

Board Examination Requirements

All PGY 2-6 residents are required to take the American Board of Neurological Surgery written examination annually. Satisfactory progress must be shown before the resident advances to the next level of training. The examination must be passed for credit prior to the chief residency year. Wednesday evening teaching is led by the both residents and faculty to prepare our residents for the exam. The faculty also holds a “mock” oral boards to assist in examination preparation.
Fellowships

Cerebrovascular & Skullbase Surgery
This fellowship program, under the direction of Dr. Morcos, provides exposure to an aggressive surgical service, treating the entire gamut of cerebrovascular disease and a wide spectrum of skullbase tumors. The fellow works mainly with Drs. Morcos, Heros, Peterson, and Ivan, but also has regular interaction with the rest of the attending staff. The skullbase anatomy and the microsurgical laboratories are available to the fellows. Clinical research initiatives are strongly encouraged.

Neuroendovascular
The goal of the neuroendovascular fellowship is to ensure neurosurgeons, neurologists and radiologists become experts in neurointerventional procedures. Approximately 900 cases per year are performed at Jackson Memorial Hospital out of which, 350 are major interventional procedures. The fellow works primarily with Dr. Peterson but will have regular interactions with other members of the neurosurgery, neurology and radiology faculty. Extensive research opportunities are available.

Pediatric Neurosurgery
A one year clinical fellowship available only to neurosurgeons who have completed general neurosurgery training. The fellow trains as part of the Neurosurgery's pediatric division and in affiliation with Nicklaus Children's Hospital. The fellow will work with the five full-time pediatric neurosurgery faculty who typically complete over 700 pediatric surgical cases annually. There are opportunities for basic and clinical research during the fellowship as well as an extensive conference schedule.

Spine Surgery
Fellowship positions are available which provide extensive exposure to all facets of modern spinal surgery. Dr. Wang directs the Spine Fellowship. Experience is gained in trauma, degenerative and vascular disease, and tumor surgery utilizing state-of-the-art techniques in instrumentation, microsurgery, and neurophysiologic monitoring. Extensive research opportunities are available in this area. Our spine neurosurgery faculty includes Drs. Levi, Green, Wang, Vanni, Levene, Côté, Romero, and Manzano.

Research
The Miami Project to Cure Paralysis is a comprehensive scientific research program focused on spinal cord injury and co-founded by Dr. Green. The cutting edge research conducted at the Lois Pope LIFE Center encompasses every aspect of neuroscience (molecular and cellular biology, tissue transplantation and regeneration, and physiology and functional studies) which are translated into the clinical arena. A multidisciplinary team of basic scientists and clinicians work together in a unique, integrated environment under the auspices of the neurosurgery. For Federal Fiscal Year 2010, the Department of Neurological Surgery at the University of Miami, Miller School of Medicine was ranked #3 in the nation based on NIH Funding.

An internationally recognized neuroscientist and Vice-Chairman of Research, Dr. Dalton Dietrich serves as a liaison between the clinical and research faculty of the department, assisting each fellow in planning and implementing their one or two year research program.

The Miami Project is a center of neuroscience excellence and an important resource for the neurosurgical fellows and residents.
Facilities

Jackson Memorial Hospital (JMH) is one of the largest and busiest hospitals in the United States. JMH serves as the only Level I Trauma Center in South Florida. The adult neurosurgical service at JMH is situated on the seventh, eighth and ninth floors of the West Wing of the hospital. The seventh and ninth floors are each 36-bed patient care units. The eighth floor is the 24-bed Neurosurgical Intensive Care Unit, which provides all aspects of critical care management. Several rotations also take place at the Veterans Affairs Medical Center (VAMC) and University of Miami Hospital (UMH). UMH is a recently acquired facility with a dedicated neurointensive care unit located across the street from the Medical Campus.

Pediatric patients are housed at Nicklaus Children’s Hospital located a few miles south and JMH’s Holtz Children’s Hospital located at the Medical Campus. There are more than 3,800 major neurosurgical pediatric procedures performed by this service each year.

The Ryder Trauma Center contains separate dedicated operating rooms used for acute head injuries. Surgical procedures are also conducted in a state-of-the-art microsurgical skullbase laboratory shared with the Otolaryngology Department. Led by Dr. Morcos, the presence of the neurosurgery laboratory creates an opportunity for residents and fellows to practice microsurgical techniques, such as microanastomosis, on experimental animals.

Jackson Memorial Hospital, Veterans Affairs Medical Center, and University of Miami Hospital and Clinics are located on the Medical Campus, a five-block area in the city center of Miami between downtown and the Miami International Airport. The Nicklaus Children’s Hospital is located 20 minutes south and accessible via highway or Miami-Dade Transit’s Metrorail System.

Conferences

Throughout the academic year, we will invite nationally and internationally distinguished visiting professors to speak in their specific area of expertise. Dr. Heros conducts a service report and teaching conference three times a week and Dr. Levi conducts a weekly joint spine conference with the orthopedic spine service. Chief residents hold a weekly resident conference in preparation for the written boards.

Rosomoff Research Day

This annual event includes presentations of original research by the residents, fellows, clinical faculty, and visiting professors. The day is named in honor of the long career in clinical research of the late Dr. Hubert Rosomoff, the department’s former Chairman Emeritus.
Neurosurgery
Sports Day

Each year neurosurgery residents, fellows, and clinical faculty participate in the Neurosurgery “Sports Day”. The department competes against residents and fellows in other specialty areas for bragging rights. We also compete in the annual Neurosurgery Softball Championship in New York, hosted by Columbia University, to help benefit the Brain Tumor Foundation. We won the Championship Trophy in 2012. These events promote fitness and comradery.

Living in Miami

Miami is an energetic global center with one of the world’s busiest airports and the largest cruise port on the planet. Miami is home to more than 1,500 multinational companies and the only community outside of Switzerland to annually host the world’s premiere art fair, Art Basel.

Residents of Miami also experience a wide array of talent at one of the world’s finest venues, the new Adrienne Arsht Center for the Performing Arts, as well as the nation’s orchestral academy, The New World Symphony and one of the top ballet companies in America, Miami City Ballet. Miami also boasts professional NFL, NBA, NHL, and MLB teams.

Area beaches have been recognized as top picks for recreation and families, and have been ranked among the best beaches by USA Today and the Travel Channel.

Whether you prefer the urban lifestyle of downtown Miami or Brickell, the beachfront of Miami Beach or Key Biscayne, or the suburbs, there are options for everyone.

How to Apply

Residents

To apply for a Residency Position please use the ERAS Matching Service.

Application Requirements:

- USMLE Step 1 and a minimum passing score of 230
- 3 letters of recommendation (preferable from other academic neurosurgeons)
- Research experience is preferred, but not required.

Our deadline for application is September 30th of each year.

We accept International Medical Graduates (IMG) who meet the qualifications listed and those who have a valid ECFMG Certificate and have completed USMLE Steps 1, 2 and 3, all with a minimum score of 230, and who meet immigration requirements for a J1 Clinical Visa.

Previous clinical and research experience in the U.S. is preferred but not required for IMG’s to apply for Residency.

Fellows

If you are interested in applying for a Fellowship, you must have completed an accredited Residency Program in Neurological Surgery to qualify.

For additional information, please contact the Neurological Surgery Education Office via email at nrstraining@med.miami.edu and specify your preferred academic year and fellowship subspecialty.
About Us
Serving more than five million people as the only academic medical center in South Florida, UHealth – University of Miami Health System/ Miller School of Medicine has earned international acclaim for research, clinical care, and biomedical innovations. Founded in 1952 as Florida’s first accredited medical school, the University of Miami Leonard M. Miller School of Medicine provides medical staff for the nationally renowned University of Miami/ Jackson Memorial Hospital Medical Campus and University of Miami Hospital. University of Miami Hospital is the flagship facility of UHealth, which also includes two additional University-owned hospitals: Sylvester Comprehensive Cancer Center and Anne Bates Leach Eye Hospital, home to the top-ranked Bascom Palmer Eye Institute. Our affiliated hospitals on the medical campus include Jackson Memorial Hospital, JMH’s Holtz Children’s Hospital, and the Miami Veterans Affairs Medical Center.

Our new institutes, such as Interdisciplinary Stem Cell Institute, Miami Institute for Human Genomics, and the Center for Computational Sciences, will further enhance research. The research conducted here continues to enrich the quality of life for people worldwide.

Statistics & Rankings
Each year, the University of Miami’s Miller School of Medicine’s more than 1,200 faculty physicians have over a million primary care patient encounters in primary care and more than 100 medical specialties and sub-specialties. UHealth also has more than 8,000 employees. In 2014, U.S. News & World Report listed Bascom Palmer Eye Institute as the number one hospital in the country for ophthalmology for the seventh year in a row. Three other UM Miller School of Medicine specialties were also listed among the nation’s best: neurosurgery, ear, nose and throat and geriatrics. Research is a top priority, with more than 1,500 ongoing projects funded by more than $200 million in external grants and contracts to UM faculty.

The Medical Campus consists of nearly 68 acres within the 153-acre complex of the University of Miami/Jackson Memorial Medical Center, including more than 500,000 square feet of research space with the recently completed UM Life Science Park, which has added an additional two million square feet of space to the medical campus.

The UM Life Science Park brings together academia and industry for collaboration in bioscience research innovation.

Our centers of excellence are continually ranked among the nation’s best, including Bascom Palmer Eye Institute, The Miami Project to Cure Paralysis, and the Diabetes Research Institute.

Neurosurgery Accreditation & NIH Ranking
The Department of Neurosurgery has again been granted the maximum 5 year accreditation by the ACGME – RCC, a level which is only awarded to 20% of neurosurgery departments nationally. The Department of Neurosurgery at the University of Miami’s Leonard M. Miller School of Medicine received its original accreditation in 1965. The department ranks 3rd in the country in 2010 NIH research funding and number 38 in the last U.S. News & World Report.
Full Time Clinical Faculty

Levi, Allan D., M.D., Ph.D.
Professor & Chairman of Neurological Surgery Chief of Service, Jackson Memorial Hospital

Morcos, Jacques J., M.D.
Professor & Co-Chairman of Neurological Surgery Division Chief, Cranial Medical Director, Neurosurgery Cranial UMHC

Benveniste, Ronald J., M.D., Ph.D.
Associate Professor of Clinical Neurological Surgery Director, Neuro-Oncology UMHC

Bullock, Malcolm R., M.D., Ph.D.
Professor of Neurological Surgery Medical Director, Neuro-Trauma JMH

Côté, Ian., M.D.
Assistant Professor of Clinical Neurological Surgery, Chief Spine Service JSCH

Elhammady, Samy A., M.D.
Assistant Professor of Clinical Neurological Surgery

Green, Barth A., M.D.
Professor of Neurological Surgery Chairman of the Miami Project to Cure Paralysis

Guest, James D., M.D., Ph.D.
Associate Professor of Clinical Neurological Surgery

Heros, Roberto C., M.D.
Professor of Neurological Surgery Program Director

Ivan E, Michael M.D.
Assistant Professor of Clinical Neurological Surgery Chief, Cranial and Neuro-Oncology Service JSCH

Jagid, Jonathan R., M.D.
Associate Professor of Clinical Neurological Surgery Medical Director, DBS at UMH

Sarah C. Jernigan, M.D.
Assistant Professor of Clinical Neurological Surgery

Komotar, Ricardo Jorge, M.D.
Assistant Professor of Clinical Neurological Surgery Medical Director, Neuro-Oncology, UMH Co-Director, Neuro-Oncology, UMHC Assistant Program Director

Landy, Howard J., M.D.
Professor of Neurological Surgery Co-Medical Director Cyberknife UMHC Clerkship Director

Levene, Howard B., M.D., Ph.D.
Assistant Professor of Clinical Neurological Surgery

Manzano, Glen R., M.D.
Assistant Professor of Clinical Neurological Surgery, Medical Director, Neurosurgery Spine Tumors, UMHC

Peterson, Eric C., M.D., M.S.
Director of Endovascular Neurosurgery, University of Miami Hospital and Jackson Memorial Hospital, Director of Endovascular Fellowship, University of Miami

Romero, Luis, M.D.
Assistant Professor of Clinical Neurological Surgery

Vanni, Steven, D.O., D.C.
Associate Professor of Clinical Neurological Surgery Division Chief, Spine Medical Director, Spine JMH

Wang, Michael Y., M.D.
Professor of Neurological Surgery Chief of Service, UMH Medical Director, Minimally Invasive Spine UMHC

Hotz, Gillian A., Ph.D.
Director Neurotrauma Outcome Research Co-Director Pediatric Neurotrauma Program Associate Research Professor

Yavagal, Dileep R., M.D.
Co-Director of Endovascular Neurology
Serve our patients to the best of our ability by providing them with excellent neurosurgical care.

Advance the field of neurosurgery through our clinical and research training programs.

Develop new progressive treatments for neurological disorders.
Mission Statement

Our mission is to serve our patients to the best of our ability by providing them with the best neurosurgical care available in the world and by advancing the field of neurosurgery through our clinical and research training programs by which we hope to develop new and better treatment for neurological disorders.

We are equally committed to the training of resident and fellow physicians, and to the continuing medical education of practicing physicians in the art and science of neurosurgery.